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ABSTRACT

The 1985-1986 operating fund requirements for Ontario higher education institutions are examined. After reviewing the Ontario government's funding record for higher education, statistical tables are presented, including the following: interprovincial comparisons of university financing; Ontario Universities' share of provincial budgetary expenditures; Council of Ontario Universities' funding recommendations for 1985-1986; interprovincial comparisons of operating grants to universities per full-time-equivalent student, 1974-1975 to 1983-1984; provincial operating grants for universities per \$1000 of provincial personal income; expenditures per client served, 1973-1974 to 1982-1983; interprovincial comparisons of total operating expenses per client; estimated tax capacity, tax revenue, and tax effort, 1983-1984; Canadian unemployment and participation rates by educational attainment; projected annual percentage increases in the Consumer Price Index; benefit costs and increases relative to salary expenditure in universities and government; and index of expenditure on library acquisitions. A summary of 1983-1984 college enrollment trends and projections for 1984-1985 is appended, along with information on the Ontario University nonsalary price index. (SW)

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BRIEF TO THE ONTARIO COUNCIL ON UNIVERSITY AFFAIRS ON
OPERATING GRANT REQUIREMENTS FOR 1985-86

"We have been told that perhaps we are underfunding our post-secondary institutions and I think it is a legitimate area of debate."

Premier William Davis
23 February, 1984

Introduction

The plight of the Ontario universities has been well documented by previous COU Briefs to OCUA on operating grant requirements. Erosion of financial support to universities in Ontario has been evident throughout the past decade. The persistent decline in the previously high priority placed upon public funding of higher education in this province has meant a weakening of every aspect of the universities' ability to fulfil their mission in society. They survive, but in a diminished state.

The mission of universities in Ontario was specified by OCUA in 1978 in terms of five goals or objectives. Those five goals encouraged the universities to develop a more educated populace, to educate and train people for the professions, to provide for study at the highest intellectual level, to conduct basic and applied research including development and evaluation, and to provide service to the community.¹ As recently as 15 December, 1983, when announcing the establishment of a Commission on the Future Development of the Universities of Ontario, the Minister of Colleges and Universities acknowledged that the "government

¹ OCUA, "The Ontario University System: A Statement of Issues", September 1978.

recognized and accepted (these goals) as meeting the needs of the people of Ontario and Canada".² We assume that the Government still holds these goals to be valid. If it does, then attention must be focused on the lack of funding commensurate with society's expectations.

The revisions to the operating grants formula announced by the Minister on 16 December, 1983, and her establishment of the Bovey Commission signify the government's willingness to acknowledge that the universities are having grave difficulties in meeting the challenges before them. It remains to be seen how the Commission will analyze the situation and what recommendations it will make for dealing with it. It also remains to be seen how the government will respond. Given the Commission's timetable, no resultant action will be taken before early 1985. In the meantime, planning for the 1985-86 academic year must proceed.

This Brief continues the work of previous years. It does not reiterate all of the arguments presented previously by the COU Committee on Operating Grants. Rather, it presents updated information necessary to demonstrate the continuing relevance of those arguments. It also presents data required by OCUA to advise the Minister of Colleges and Universities on the level of funding needed by universities in 1985-86.

Funding Background

The COU Committee on Operating Grants has repeatedly demonstrated in its

² Statement to the Legislature by the Honourable Bette Stephenson, M.D., Minister of Colleges and Universities, December 15, 1983.

operating grants briefs that the Ontario government's increases in grants to universities have failed to keep up with inflation and enrolment growth during most of the past decade. University grant increases have also failed to keep up with those provided in the other nine provinces, or with funding increases provided to schools, hospitals, correctional institutions, and other publicly supported sectors in Ontario. No matter what measures are chosen, the relative level of government support for universities in this province over the past ten years has shown major financial decline.

We would be remiss in failing to note that the last three operating grant increases announced by the government for 1982-83, 1983-84, and 1984-85 have all been at or above the rate of inflation. Notwithstanding these increases, however, the financial position of Ontario universities has continued to decline principally because of significant enrolment growth.

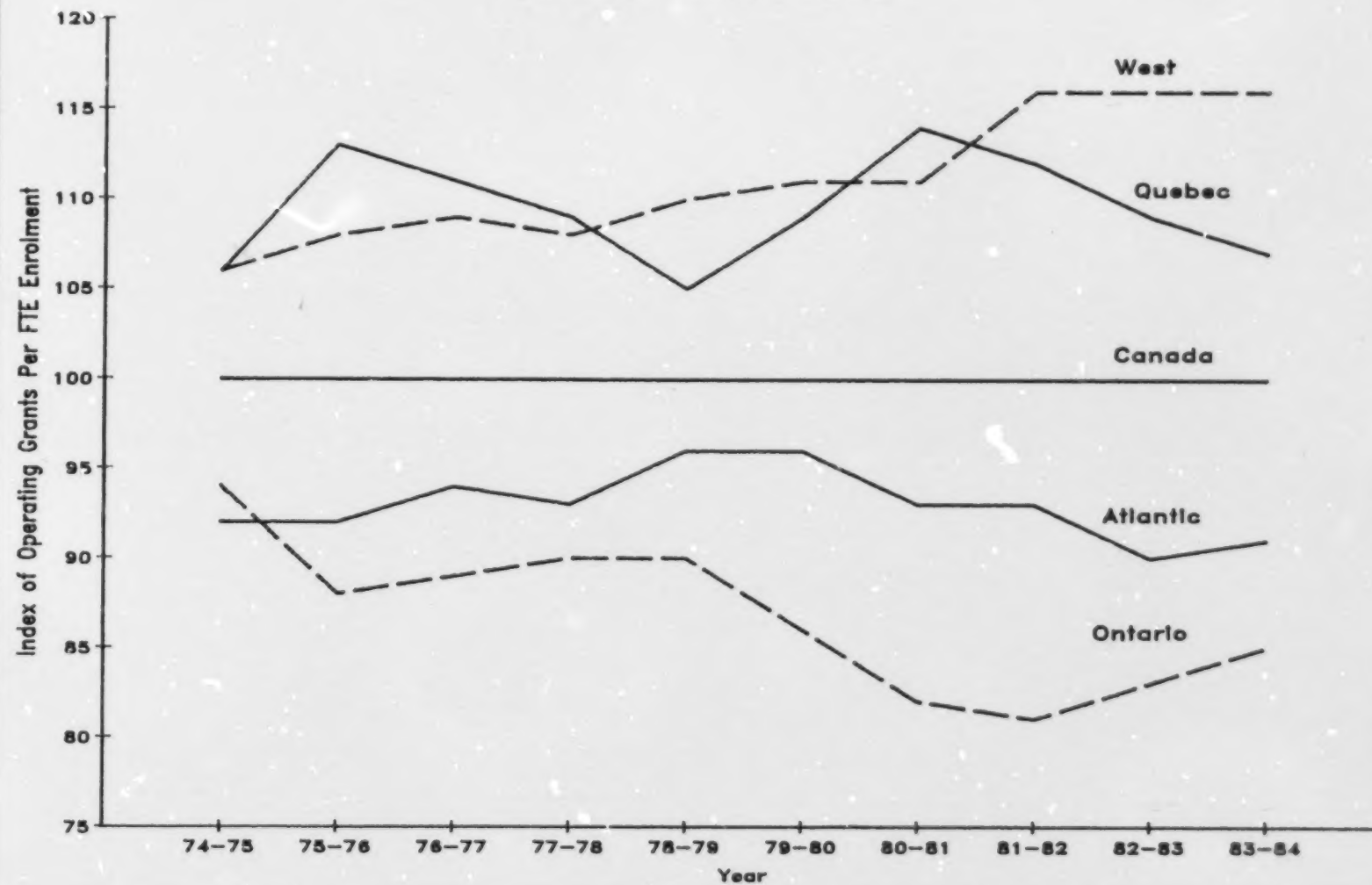
The most explicit indicators of relative levels of government support for universities are those developed by the Tripartite Committee on Interprovincial Comparisons. The Committee has developed eight indicators or measures of support for universities by provincial governments, all of which show (see Table 1) - in the case of Ontario - approximately the same thing. The Ontario government continues to provide less financial support per student for its universities than virtually every other provincial government in Canada. Figure 1 demonstrates in a graphic manner what has happened to funding levels in Ontario in comparison with other provinces. It is based upon the most frequently cited of all the indicators - provincial government operating grants to universities per FTE enrolment at those universities. Estimates for the current year,

Table 1
Interprovincial Comparisons of University Financing
1981-82

<u>Indicators</u>	ONTARIO	RANK	AVERAGE OF REST OF CANADA	ADDITIONAL FUNDING REQUIRED TO EQUAL REST OF CANADA	
				<u>TOTAL REQUIRED</u> (\$ millions)	<u>TOTAL PER</u> <u>STUDENT</u> \$
1) GRANTS PER STUDENT	\$ 4,476	(10)	\$ 6,112	\$ 318.3	\$ 1,636
2) GRANTS PER CAPITA	\$ 101	(9)	\$ 136	\$ 307.9	\$ 1,583
3) GRANTS + STUDENT AID PER CAPITA	\$ 106	(9)	\$ 144	\$ 323.9	\$ 1,665
4) GRANTS + FEES PER STUDENT	\$ 5,529	(9)	\$ 6,727	\$ 233.0	\$ 1,198
5) TOTAL OPERATING INCOME PER STUDENT	\$ 5,794	(9)	\$ 7,071	\$ 248.5	\$ 1,277
6) GRANTS + STUDENT AID AS A % OF GROSS GENERAL EXPENDITURE	4.57%	(5)	4.66%	\$ 18.1	\$ 93
7) GRANTS PER \$1,000 OF PERSONAL INCOME	\$ 8.06	(10)	\$ 12.33	\$ 461.4	\$ 2,372
8) OPERATING EXPENDITURES AS A % OF GROSS DOMESTIC PRODUCT	0.87%	(9)	1.17%	\$ 389.9	\$ 2,004

Source: Tripartite Committee on Interprovincial Comparisons Interprovincial
Comparisons of University Financing, January 1984.

Figure 1
 INDEX OF OPERATING GRANTS PER FTE ENROLMENT
 1974-75 to 1983-84
 (Canadian Average = 100)



1983-84, indicate that grants per student in Ontario are \$1,354 or 21.4% less than the average for the other nine provinces.³

Supporting data suggest the cause for this discrepancy. During the last decade, operating grants to universities in the other nine provinces have gone up by half as much again as those in Ontario - a 188% average increase in the other nine provinces versus a 124% increase in Ontario.⁴ As one consequence of this, tuition fee income in Ontario represents a higher proportion of total operating income than in any other province except Prince Edward Island.⁵ More than 50% of tuition fees for credit courses collected at Canadian universities are raised in Ontario. This heavy reliance on fee revenue, however, does not compensate for the major shortfall which exists in operating grants. University income, including tuition fees, is still \$1,200 per student lower in Ontario than in the rest of the country.

It has also become apparent that the Ontario government has chosen, for most of the past decade, to gradually reduce its level of support to higher education relative to its support of other sectors. As Figure 2 shows, schools and hospitals, for example, have received higher priority in public funding than have universities.⁶ The universities' share of

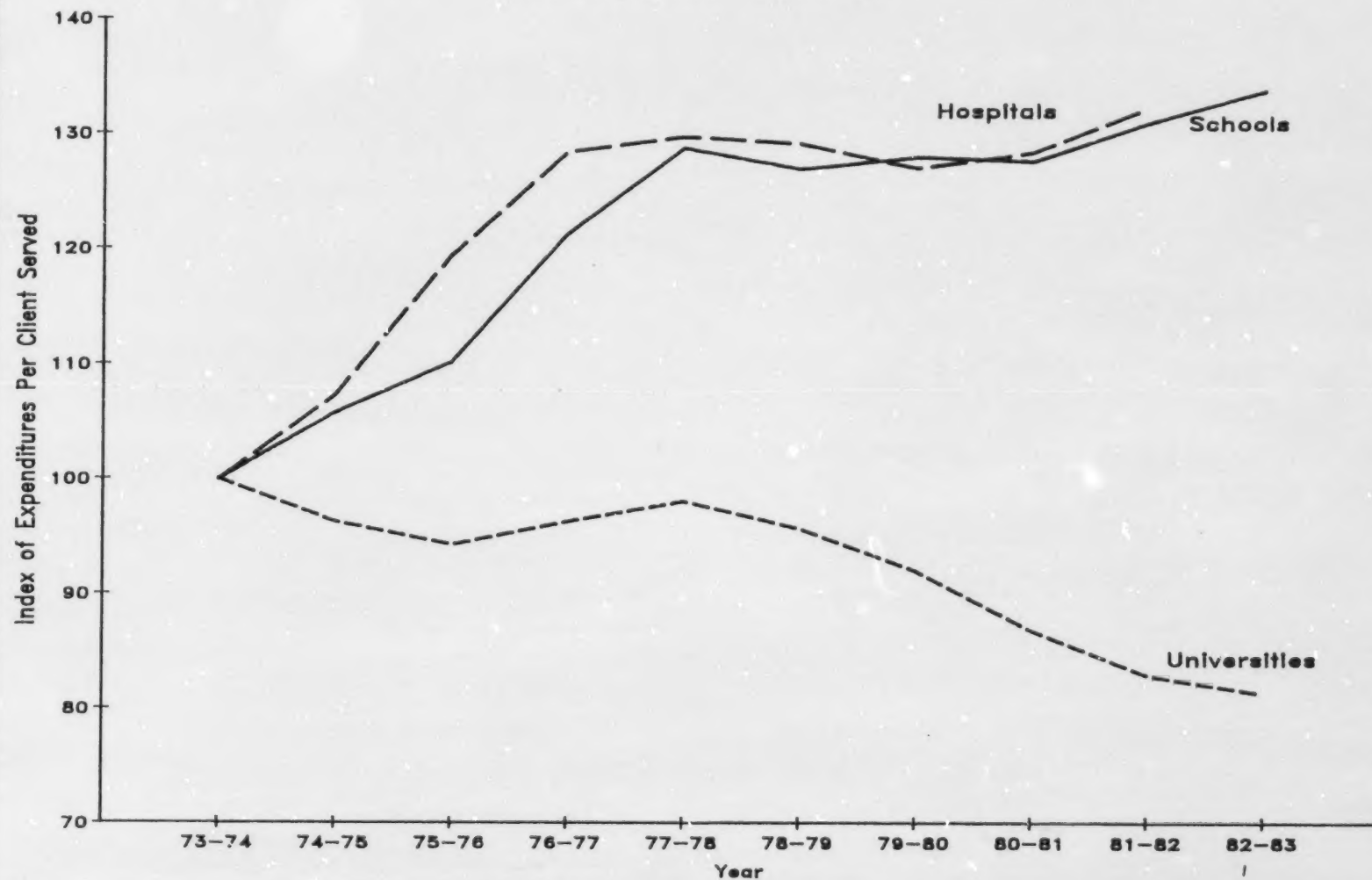
³ Table 4, in the section "Additional Figures and Tables", provides supporting data for this graph and Table 5 shows measures of the level of operating grants in terms of each province's personal income.

⁴ See Table 6.

⁵ See Table 7.

⁶ See Tables 8 and 9.

Figure 2
 INDEX OF EXPENDITURES PER CLIENT SERVED IN ONTARIO
 1973-74 to 1982-83
 (In Constant Dollars)



budgetary expenditures in Ontario has declined by approximately 23% since the early 1970s (see Table 2). This has happened because, in virtually every year throughout the 1970s and 1980s, the increase in operating grants to universities has been substantially less than the average increase of expenditures by the Ontario government as a whole.⁷ The government's policy of underfunding higher education has been persistently applied and, after a decade or more of application, has resulted in the most underfunded university system in the country.

As far as the Operating Grants Committee has been able to determine, this has not been the result of basic deficiencies inherent in the Ontario economy which preclude adequate support to this province's universities.⁸ The Government of Ontario takes up a smaller share of the total provincial income than does any other provincial government in Canada.⁹ Borrowings, which all come from various non-public funds like the Canada Pension Plan, are generally used to finance capital spending.¹⁰ As the Treasurer of Ontario, the Hon. Larry Grossman, reminded the provincial legislature last December, "cash requirements have

⁷ See Table 10 and Figure 3.

⁸ See Table 11.

⁹ See Table 12.

¹⁰ See Table 13.

Table 2
Ontario Universities' Share of Provincial Budgetary Expenditures
 (Excluding Public Debt Interest Payments)

	<u>Universities' Share</u>	<u>Universities' Annual Shortfall from 1972-73 Level of Government Support</u>
	%	\$ millions
1972-73	6.6	-
1973-74	6.3	18.2
1974-75	6.0	51.0
1975-76	5.8	79.0
1976-77	6.0	67.0
1977-78	5.9	81.0
1978-79	5.9	92.9
1979-80	5.6	138.0
1980-81	5.5	167.8
1981-82	5.2	253.6
1982-83	5.1	311.8
1983-84 (estimate)	5.1	326.2

Source: Ontario, Public Accounts, various years.
 Ontario, Estimates, 1983-84

been less than capital investment in five of the past nine years. In some jurisdictions, this would be called an 'operating surplus'.¹¹ Nor is this the result of a lack of federal funds being transferred to Ontario for the support of universities.¹²

The government's funding record for higher education in Ontario should be set against some other facts. First, even during the recent severe

¹¹ The Honourable Larry Grossman, Autumn Pre-Budget Statement 1983, December 15, 1983, page 27.

¹² See Table 14.

economic downturn, unemployment levels among university graduates were far lower than those experienced by the rest of the labour force. At the end of 1983, unemployment rates among those without university degrees were as much as three times as great as rates of unemployment among university graduates. Second, rates of participation in the labour force among university graduates are far greater than among those with less education. Higher education is a heavily utilized public investment.¹³ And third, total enrolment has grown significantly during the past decade and is presently at record levels.

University Financial Needs in 1985-86

The funding model utilized by OCUA does not address the actual financial needs of Ontario universities. Rather, it assumes, despite evidence to the contrary, that the level of funding in the current year is adequate and then it takes account of certain projected cost increases. This method of establishing funding needs ignores discrepancies between the universities' needs as judged by OCUA and the actual level of operating support provided in the previous year. Therefore it ignores the accumulated effects of underfunding. While noting the anomaly, this brief continues to employ the OCUA funding model.

Table 3 illustrates the application of those projected cost increases recognized by the OCUA funding model which are used to produce an estimate of total expenditures in 1985-86. To estimate salary and benefit cost increases, the table assumes an increase in the Consumer Price Index of 5.4% in 1985-86, although uncertainties in the economy suggest

¹³ See Table 15 and Figure 4.

Table 3

COU Funding Recommendations for 1985-86
(\$ millions)

	<u>Estimated Expenditures 1984-85</u>	<u>Inflationary Trend Cost 1985-86</u>	<u>Existing Service Level Cost 1985-86</u>	<u>Net Enrolment Costs 1985-86</u>	<u>Cost of Basic Objectives 1985-86</u>
Salaries and Benefits	1217.7	65.8	20.5	10.1	1314.1
Non-Salary	308.5	19.4	40.0	2.9	370.8
Total	1526.2	85.2	60.5	13.0	1684.9

that the actual increase might be somewhat greater.¹⁴ It also assumes net PTR staff salary cost increases of 1.6%, as calculated by the COU faculty flow model.

In previous briefs, the Operating Grants Committee has demonstrated how academic salaries had fallen behind those of comparable professional groups. Recent legislative constraint on university salaries will not have improved that situation. Removal of legislative constraint will, at the very least, produce some pressure to restore salary comparability. To the extent that this is successful, provision for salary increases at the level of CPI may be unduly conservative. As

¹⁴ See Table 16.

well, we continue to be concerned about use of projected inflation rates to estimate employee benefit costs. These costs have been increasing substantially, largely because of government-imposed increases in statutory benefits such as Unemployment Insurance, Workers' Compensation and OHIP.¹⁵ Continuing cost pressures can be expected in this area, particularly since benefits at universities are still 20% less costly than those provided by the Ontario government to its own employees.¹⁶

To estimate non-salary cost increases, the historical relationship between the CPI and the newly-revised Ontario University Non-Salary Price index is applied to projected data. On average, annual increases in the revised OUNSPI have been 16.2% higher than the increases in the CPI and the continuation of this relationship would result in a 6.3% increase in the OUNSPI during 1985-86.¹⁷ To maintain existing service levels with respect to non-salary expenditure, the Operating Grants Committee again recommends provision of adequate funding for equipment replacement. It has recommended the provision of an additional \$40 million in 1985-86 and embedded this recommendation in its advice on university basic financial requirements.¹⁸ It urges OCUA to include this provision in its funding model.

15 See Table 17.

16 See Table 18 and Figure 5.

17 See Table 19 and Figure 6.

18 This number is the additional funding required to implement a 12-year replacement cycle for equipment stocks valued at approximately \$1 billion.

For the coming year, the COU Committee on Enrolment Statistics and Projections has provided a series of enrolment estimates which suggest a 3.1% overall FTE enrolment increase.¹⁹ These projections were based on assumptions about institutional inability to absorb further enrolment growth and will, therefore, be utilized in the funding model, although early rates of application at Ontario universities suggest that pressure for places may exceed capacity.

The new formula announced by the Minister in December, 1983, provides for a 75% discounting of any enrolment changes and this revision has been built into the funding model. Provision for enrolment growth, for component cost increases and for maintenance of existing service levels gives rise to an overall funding requirement 10.4% above 1984-85 levels.

Finally, it should be noted that the Operating Grants Committee has established a special Subcommittee on Capital Requirements to review university needs in this area. Their work to date suggests that there is a large and growing need for major renovation and alteration expenditures, as well as for selected new capital projects. COU will be reporting to CCUA on capital requirements in the near future.

Conclusion

COU asks, with regard to operating grant requirements for 1985-86, that CCUA recommend to the Government of Ontario an increase in basic operating income of 10.9%, the minimum funding increase sufficient to prevent further erosion of university resources. Given societal expectations

¹⁹ See Appendix 1.

and the province's obvious need for a continuing supply of highly qualified manpower and for expanded basic and applied research activity, the university community holds the firm view, however, that present levels of government support are, in a word, inadequate. One of the principal challenges facing the Commission on the Future Development of the Universities of Ontario is and must be to weigh the balance between societal expectations and government funding. Having established that balance, it must then provide an explicit means of defining appropriate funding levels for future years. For now at least, OCUA's challenge will be to ensure that the basic fabric of the university community remains intact.

APPENDICES

Table 4
Interprovincial Comparisons of Operating Grants to Universities
Per FTE Student 1974-75 to 1983-84

	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83e</u>	<u>1983-84e</u>
British Columbia	\$3,029 (4)	\$3,577 (4)	\$4,049 (4)	\$4,521 (3)	\$5,025 (3)	\$5,337 (3)	\$5,683 (4)	\$6,435 (2)	\$6,608 (2)	\$6,438 (2)
Alberta	3,345 (1)	4,053 (1)	4,358 (1)	4,797 (1)	5,339 (2)	5,813 (2)	6,758 (1)	7,386 (1)	7,812 (1)	8,175 (1)
Saskatchewan	2,977 (5)	3,410 (5)	3,767 (5)	4,107 (5)	4,615 (5)	5,096 (5)	5,302 (3)	5,612 (5)	5,930 (4)	6,016 (5)
Manitoba	2,595 (8)	3,016 (6)	3,453 (6)	3,874 (7)	4,123 (7)	4,770 (6)	4,499 (7)	5,098 (6)	5,277 (6)	5,562 (6)
Quebec	3,057 (3)	3,752 (3)	4,079 (3)	4,449 (4)	4,657 (4)	5,299 (4)	5,935 (2)	6,176 (3)	6,258 (3)	6,253 (4)
New Brunswick	2,704 (6)	3,003 (7)	3,445 (7)	3,905 (6)	4,364 (6)	4,762 (7)	4,929 (6)	4,998 (7)	5,243 (7)	5,177 (7)
Nova Scotia	2,431 (9)	2,836 (9)	3,233 (9)	3,497 (9)	3,819 (9)	4,074 (10)	4,379 (9)	4,908 (8)	5,027 (8)	5,038 (8)
Prince Edward Island	2,414 (10)	2,589 (10)	2,974 (10)	3,030 (10)	3,544 (10)	4,246 (8)	4,441 (8)	4,720 (9)	4,782 (10)	4,927 (10)
Newfoundland	3,079 (2)	3,809 (2)	4,157 (2)	4,625 (2)	5,485 (1)	5,994 (1)	5,684 (3)	5,847 (4)	5,548 (5)	6,332 (3)
9 Provinces	2,983 -	3,577 -	3,950 -	4,347 -	4,705 -	5,231 -	5,703 -	6,112 -	6,266 -	6,334 -
Ontario (Rank)	2,690 (7)	2,913 (8)	3,265 (8)	3,669 (8)	4,002 (8)	4,140 (9)	4,273 (10)	4,476 (10)	4,792 (9)	4,980 (9)
Canada	\$2,871 -	\$3,322 -	\$3,687 -	\$4,097 -	\$4,455 -	\$4,840 -	\$5,193 -	\$5,529 -	\$5,746 -	\$5,853 -

e = estimate

Source: Interprovincial Comparisons of University Financing, Tripartite Committee on Interprovincial Comparisons, January, 1984, for actual data. COU Research Division for estimates.

Table 5
Provincial Operating Grants for Universities
Per \$1,000 of Provincial Personal Income

	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83e</u>	<u>Rank 1982-83</u>
British Columbia	\$ 9.78	\$ 10.68	\$ 10.72	\$ 10.70	\$ 10.57	\$ 9.91	\$ 9.44	\$ 9.45	\$ 9.28	(9)
Alberta	13.88	14.94	14.40	13.97	13.10	11.87	11.73	11.22	11.80	(5)
Saskatchewan	11.30	10.93	11.44	12.09	11.83	11.30	10.74	9.59	10.56	(8)
Manitoba	11.81	11.95	12.66	13.00	11.79	12.12	11.15	10.54	11.09	(7)
Quebec	12.25	13.58	13.11	13.87	14.12	14.44	14.89	14.02	13.38	(3)
New Brunswick	14.47	14.11	14.12	14.12	13.90	13.41	13.37	13.10	13.37	(4)
Nova Scotia	14.61	15.93	16.10	15.76	15.14	14.24	14.41	14.38	14.30	(1)
Prince Edward Island	11.96	11.22	11.75	12.76	11.68	12.22	11.40	11.24	11.29	(6)
Newfoundland	13.79	14.61	14.61	15.26	15.24	15.21	14.85	14.48	14.23	(2)
9 Provinces	12.12	13.05	12.89	13.22	13.03	12.77	12.72	12.12	12.03	-
Ontario	9.95 (9)	10.06 (10)	10.18 (10)	10.01 (10)	9.47 (10)	8.87 (10)	8.45 (10)	7.96 (10)	8.10 (10)	- (10)
Canada	11.24	11.86	11.82	11.96	11.64	11.25	11.08	10.53	10.53	-
e = estimate										
Source: <u>Interprovincial Comparisons of University Financing</u> , Tripartite Committee on <u>Interprovincial Comparisons</u> , January, 1984, for actual data. COU Research Division for estimates.										

Table 6
Interprovincial Comparisons of University Financing
Percentage Increases in Net Total Operating Grants, 1974-75 to 1983-84

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83^e</u>	<u>1983-84^e</u>	<u>Total Increase</u> <u>74-75 to 83-84</u>	<u>Rank</u>
										<u>Σ</u>	
British Columbia	25.9%	15.2%	11.8%	11.1%	6.8%	10.6%	16.9%	7.5%	0.0%	167.1	(6)
Alberta	31.2	10.7	10.8	8.7	8.5	17.3	17.3	17.2	8.7	232.9	(1)
Saskatchewan	21.1	13.5	8.7	9.4	7.3	7.0	13.9	17.0	7.0	167.9	(5)
Manitoba	19.0	15.9	12.0	0.5	12.0	0.7	15.4	15.7	10.3	157.9	(8)
Quebec	29.2	12.3	16.8	13.1	14.0	17.3	9.7	4.5	1.5	198.2	(2)
New Brunswick	18.3	11.7	9.7	9.5	8.4	8.5	10.7	13.6	5.4	147.4	(9)
Nova Scotia	25.8	13.9	9.0	8.0	5.0	11.8	13.2	11.2	6.0	164.3	(7)
Prince Edward Island	15.6	14.7	19.0	8.2	14.4	7.7	8.9	12.7	7.8	178.3	(3)
Newfoundland	25.8	13.8	15.3	7.7	11.7	7.2	13.2	10.0	2.5	171.4	(4)
9 Provinces	26.9	12.9	13.5	10.4	10.8	13.7	12.7	9.0	3.7	188.6	-
Ontario (Rank)	15.7 (9)	14.6 (4)	8.5 (10)	5.1 (9)	4.4 (10)	7.0 (9)	9.9 (8)	12.2 (6)	7.3 (4)	124.2	(10)
Canada	22.9	13.5	11.8	8.7	8.7	11.7	11.9	9.9	4.8	165.6	

^e = estimate.

Source: Interprovincial Comparisons of University Financing, Tripartite Committee on Interprovincial Comparisons, January, 1984.
 Funding announcements, various jurisdictions.

Table 7

Percentage of Universities' General Operating and Total Income, 1982-83

	<u>General Operating Income</u>				<u>Total Income</u>			
	<u>Provincial Government Grants</u>		<u>Fees Credit Courses</u>		<u>Provincial Government Grants</u>		<u>Total Fees</u>	
	<u>%</u>	<u>Rank</u>	<u>%</u>	<u>Rank</u>	<u>%</u>	<u>Rank</u>	<u>%</u>	<u>Rank</u>
British Columbia	84.8	(3)	10.8	(8)	66.7	(5)	8.6	(7)
Alberta	85.5	(2)	9.2	(9)	69.7	(3)	6.7	(10)
Saskatchewan	83.2	(6)	12.8	(5)	66.8	(4)	9.2	(6)
Manitoba	83.9	(5)	10.9	(6)	62.7	(7)	8.4	(8)
Quebec	87.4	(1)	7.7	(10)	72.3	(1)	7.3	(9)
New Brunswick	78.6	(8)	16.2	(3)	62.4	(8)	12.5	(3)
Prince Edward Island	78.9	(7)	18.0	(1)	65.3	(6)	15.1	(1)
Nova Scotia	77.0	(9)	15.8	(4)	57.6	(10)	12.3	(4)
Newfoundland	84.2	(4)	10.9	(7)	71.8	(2)	10.0	(5)
9 Provinces	84.9	-	10.1	-	68.4	-	8.3	-
Ontario	76.2	(10)	17.6	(2)	58.1	(9)	13.8	(2)
Canada	81.7%		12.9%		64.6%		10.3%	

Source: Canadian Association of University Business Officers,
Financial Statistics of Universities and Colleges 1982-83

Table 8

Expenditures per Client Served, 1973-74 to 1982-83

		1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Elementary & Secondary Education (total school costs per pupil) ¹	<u>Actual</u>	\$ 1,137	\$ 1,341	\$ 1,536	\$ 1,807	\$ 2,083	\$ 2,240	\$ 2,468	\$ 2,735	\$ 3,149	\$ 3,515
	<u>Constant</u>	1,137	1,203	1,253	1,380	1,465	1,444	1,457	1,452	1,491	1,522
	<u>Index</u>	100.0	105.8	110.2	121.4	128.8	127.0	128.1	127.7	131.1	133.9
Hospitals (gross operating costs per diem) ²	<u>Actual</u>	\$ 82.30	\$ 98.35	\$ 120.48	\$ 138.55	\$ 151.91	\$ 165.06	\$ 177.19	\$ 199.15	\$ 230.06	
	<u>Constant</u>	82.30	88.29	98.35	105.76	106.83	106.35	104.60	105.76	108.94	
	<u>Index</u>	100.0	107.3	119.5	128.5	129.8	129.2	127.1	128.5	132.4	
CAATs (operating cost per FTE student) ³	<u>Actual</u>	\$ 2,494	\$ 2,731	\$ 3,001	\$ 3,380	\$ 3,667	\$ 3,796	\$ 4,023	\$ 4,035	\$ 4,390	
	<u>Constant</u>	2,494	2,452	2,448	2,580	2,579	2,446	2,375	2,143	2,079	
	<u>Index</u>	100.0	98.3	98.2	103.5	103.4	98.1	95.2	85.9	83.4	
Adult Offenders (expenditure per inmate day) ⁴	<u>Actual</u>	\$ 27.86	\$ 33.30	\$ 34.05	\$ 41.48	\$ 47.50	\$ 50.97	\$ 55.09	\$ 60.32	\$ 61.22	\$ 66.80
	<u>Constant</u>	27.86	29.89	27.80	31.66	33.40	32.84	32.52	32.03	28.99	28.92
	<u>Index</u>	100.0	107.3	99.8	113.6	119.9	117.9	116.7	115.0	104.1	103.8
Universities (operating cost per FTE student) ⁵	<u>Actual</u>	\$ 3,385	\$ 3,633	\$ 3,913	\$ 4,272	\$ 4,723	\$ 5,030	\$ 5,277	\$ 5,534	\$ 5,930	\$ 6,354
	<u>Constant</u>	3,385	3,261	3,192	3,261	3,321	3,241	3,115	2,939	2,808	2,751
	<u>Index</u>	100.0	96.3	94.3	96.3	98.1	95.7	92.0	86.8	82.9	81.3

Sources:

1. Ministry of Education.
2. Ministry of Health, Hospital Statistics, various years.
3. Ministry of Colleges and Universities, Multi-Year Plan Analysis of the Colleges of Applied Arts and Technology, various years.
4. Ministry of Correctional Services.
5. Ministry of Colleges and Universities, MCU Financial Report, various years; COU Special Committee on Macro-Indicators Ontario Universities Statistical Compendium, various years; and Committee of Finance Officers - Universities of Ontario, Financial Report of Ontario Universities, various years.

Table 9

Interprovincial Comparisons of Total Operating Expenses

Per Client

	<u>Hospitals</u>		<u>Schools</u>		<u>Universities</u>	
	<u>Total Operating Expense</u> <u>Per Patient Day</u> (Public General and Allied Hospitals, 1982-83)		<u>School Board Expenditures</u> <u>Per Student, 1981</u>		<u>Total Operating Expenditures Per Student</u> <u>1981-82</u>	
	<u>\$</u>	<u>Rank</u>	<u>\$</u>	<u>Rank</u>	<u>\$</u>	<u>Rank</u>
British Columbia	227.57	(7)	2,949	(2)	7,197	(2)
Alberta	267.20	(4)	2,766	(4)	8,247	(1)
Saskatchewan	223.28	(8)	2,676	(6)	6,759	(5)
Manitoba	286.30	(3)	2,689	(5)	5,880	(8)
Ontario	261.65	(5)	2,862	(3)	5,826	(9)
Quebec	219.47	(9)	3,793	(1)	7,143	(3)
New Brunswick	255.57	(6)	2,257	(8)	6,139	(7)
P.E.I.	210.59	(10)	2,203	(9)	5,504	(10)
Nova Scotia	291.29	(2)	2,281	(7)	6,780	(4)
Newfoundland	306.30	(1)	2,116	(10)	6,758	(6)

Source: Statistics Canada, Hospital Statistics - Preliminary.
 Statistics Canada, Financial Statistics of Education.
 Tripartite Committee on Interprovincial Comparisons, Interprovincial Comparisons of University
Financing, January, 1984.

Table 10
Percentage Increase in Provincial Operating Grants
and Total Budgetary Expenditures

	<u>Operating Grants to Ontario Universities</u>	<u>Total Provincial Budgetary Expenditures</u>	<u>Universities Difference from Provincial Annual Increase</u>
1973-74	6.9	12.7	(5.8)
1974-75	14.6	20.8	(6.2)
1975-76	16.4	20.5	(4.1)
1976-77	14.8	12.1	2.7
1977-78	8.4	10.1	(1.7)
1978-79	5.8	7.8	(2.0)
1979-80	5.1	8.4	(3.3)
1980-81	7.2	9.7	(2.5)
1981-82	10.2	16.7	(6.5)
1982-83	12.1	14.5	(2.4)
1983-84 (estimate)	7.5	8.4*	(0.9)*
Average	9.9	12.9	(3.0)

Source: Province of Ontario, Public Accounts, various years.
Province of Ontario, Estimates, 1983-84.

* Estimates of total provincial budgetary expenditure increases have been consistently understated; e.g. estimates for 1982-83 forecast a 12.4% increase, actual expenditures increased 14.5%. This has resulted in consistently underestimating the differences between increases in grants to universities, which do not change during the fiscal year, and increases in total provincial budgetary expenditures.

Figure 3
VARIANCE BETWEEN GROWTH IN UNIVERSITY GRANTS
AND PROVINCIAL BUDGETARY EXPENDITURES
1973-74 to 1982-83

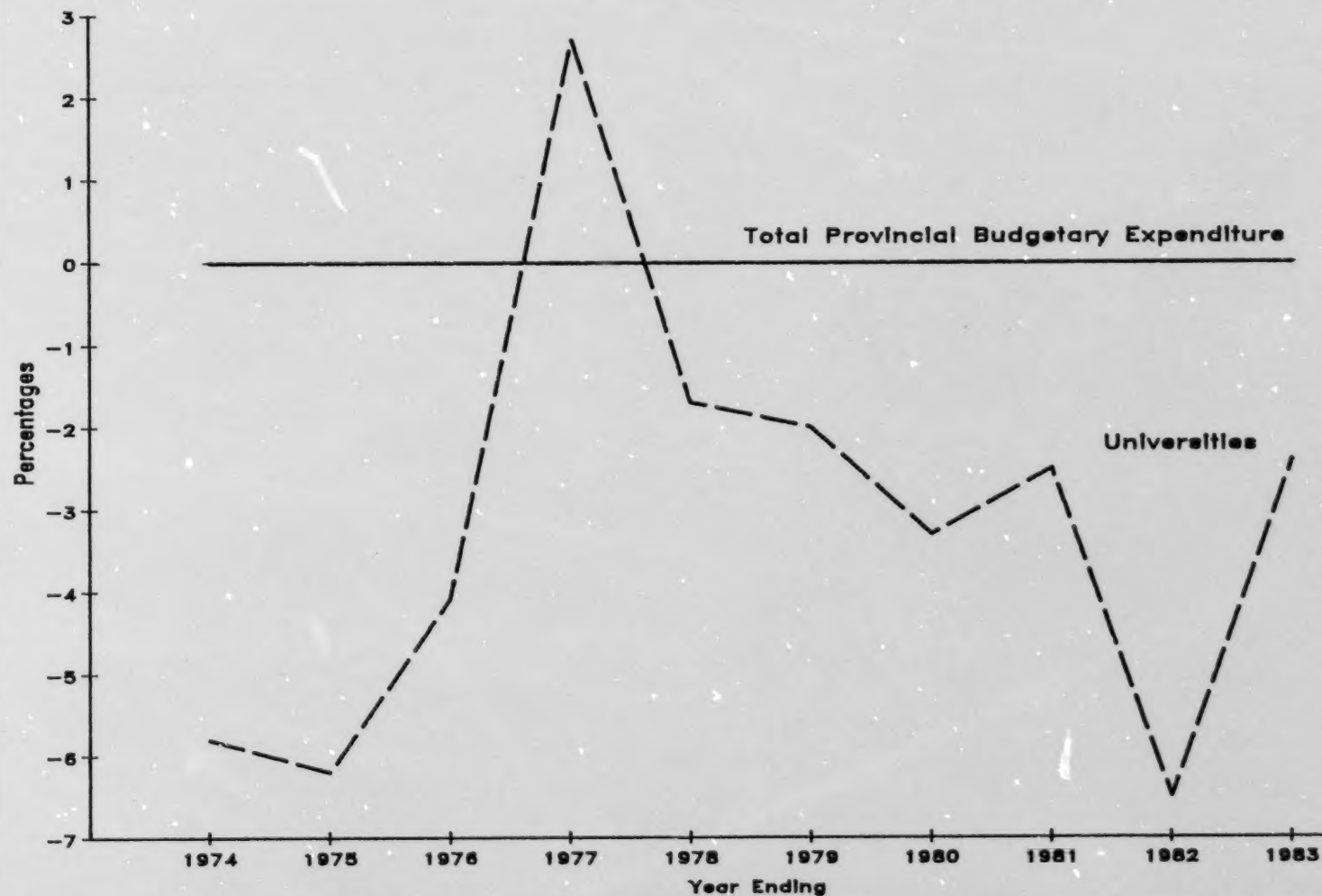


Table 11

Estimated Tax Capacity, Tax Revenue and Tax Effort

1983-84

	<u>Estimated Tax Capacity Per Capita</u> (1)	<u>Estimated Tax Revenue Per Capita</u> (2)	<u>Estimated Tax Effort Per Capita</u> (3)	<u>Estimated Tax Effort Adjusted for Surplus/Deficit</u> (4)
British Columbia	108.6	90.5	83.3	89.9
Alberta	194.5	185.3	95.3	90.9
Saskatchewan	106.5	107.1	100.6	94.9
Manitoba	81.7	81.1	99.2	111.9
Ontario	94.8	81.8	86.3	89.0
Quebec	81.8	111.7	136.7	128.9
New Brunswick	71.7	67.3	94.7	102.3
Prince Edward Island	62.7	69.4	110.7	98.6
Nova Scotia	73.0	62.6	85.8	96.7
Newfoundland	64.9	69.2	106.7	105.1
10 Provinces	100.0	100.0	100.0	100.0

Note: The indices shown exclude all federal transfers and local property taxes but include provincial revenues from natural resources and an estimate of miscellaneous revenues not normally included in federal calculations in regard to equalization payments.

Sources: Canada Department of Finance, Federal-Provincial Relations Division.
Statistics Canada.

Table 12
Estimated Gross General Government Revenue as a Percentage of
Gross Domestic Product and Provincial Personal Income
1982-83

	Gross Domestic Product (\$000,000's)	Gross General Revenue % (Rank)	Provincial Personal Income (\$000,000's)	Gross General Revenue % (Rank)
British Columbia	44,709	19.0 (9)	38,534	22.1 (9)
Alberta	53,056	25.8 (6)	32,495	42.1 (1)
Saskatchewan	15,702	20.4 (8)	12,112	26.5 (7)
Manitoba	13,930	20.5 (7)	12,407	23.0 (8)
Quebec	83,236	28.2 (5)	77,929	30.1 (5)
New Brunswick	6,630	30.7 (3)	6,451	31.6 (4)
Nova Scotia	8,299	29.8 (4)	8,597	28.7 (6)
Prince Edward Island	994	40.7 (1)	1,094	37.0 (3)
Newfoundland	4,698	40.2 (2)	4,882	38.6 (2)
9 Provinces Outside Ontario	231,254	25.3%	194,501	30.1%
Ontario	137,183	15.8 (10)	120,648	18.0 (10)
Canada	368,437	21.8%	315,149	25.4%
Source: Statistics Canada.				

Table 13
Capital Expenditures, Liquid Reserves and Borrowings
Province of Ontario, 1972-73 to 1983-84
($\$000,000$'s)

<u>Year</u>	<u>Net Borrowings</u> (1)	<u>Net Cash Requirements</u> (2)	<u>Increase (Decrease) in Liquid Reserves</u> (1) - (2) = (3)	<u>Capital Expenditures</u> (4)	<u>Operating Funds Surplus (Deficit)</u> (4) - (2) = (5) (3+4) - (1) = (5)
1972-73	\$1,028	\$ 744	\$ 284	\$ 1,103	\$ 359
1973-74	710	708	2	1,226	518
1974-75	851	977	(126)	1,399	422
1975-76	1,974	1,799	175	1,627	(172)
1976-77	1,092	1,319	(227)	1,480	161
1977-78	1,506	1,762	(256)	1,536	(226)
1978-79	1,652	1,180	472	1,361	181
1979-80	1,132	584	548	1,561	977
1980-81	968	803	165	1,709	906
1981-82	1,363	1,503	(140)	2,311	808
1982-83	2,051	2,478	(427)	2,282	(196)
1983-84 (estimate)	2,813	2,695	118	2,314	(301)

Notes:

- (1) Proceeds of Loans minus Retirement of Loans.
- (2) Expenditures minus Revenues plus or minus net Non-Budgetary Transactions.
- (3) Cash, temporary investments and marketable securities. The opening balance at the beginning of 1983-84 was \$1.594 billion.
- (4) Physical assets, buildings and land make up the bulk of this amount.
- (5) Capital expenditures minus net cash requirements equals the surplus or deficit on current, operating expenditures. It is composed of the increase or decrease in liquid reserves plus capital investments and minus net borrowings.

The above Table separates funds raised for operating purposes and funds raised for capital purposes. As shown in column 5, in eight of the previous twelve years, all operating fund requirements were met by taxation, federal transfers, or other revenue sources (i.e. no borrowed funds were involved). Net borrowings averaged \$1.4 billion per year, but in most years were used to increase liquid reserves and to finance capital expenditures. Other capital expenditures were financed out of operating funds.

Source: 1983 Ontario Budget.
Public Accounts, various years.

Table 14
Estimated Federal Government EPF Transfers
(Cash and Tax Points) to Ontario for University
Financial Support, 1977-78 to 1983-84
 (Excluding Revenue Guarantees)

	<u>Total Post Secondary</u>			<u>Federal Contribution*</u>		<u>Universities</u>	<u>Federal Share</u>		<u>total</u>
	<u>Cash</u> (\$ millions)	<u>Tax</u> (\$ millions)	<u>Total</u> (\$ millions)	<u>Cash*</u> (\$ millions)	<u>Tax*</u> (\$ millions)	<u>Operating</u> <u>Grants</u> (\$ millions)	<u>Cash</u> %	<u>Tax</u> %	<u>Share</u> %
1977-78	391.3	324.3	715.6	282.9	234.5	703.6	40.2	33.3	73.3
1978-79	457.4	362.9	820.3	330.7	262.4	744.2	44.4	35.3	79.7
1979-80	518.4	410.6	929.0	374.8	296.9	781.9	47.9	38.0	85.9
1980-81	565.6	471.5	1,037.1	408.9	340.9	838.1	48.8	40.7	89.3
1981-82e	625.2	532.9	1,158.1	452.0	385.3	923.5	48.9	41.7	90.7
1982-83e	706.4	606.0	1,312.5	510.7	438.1	1,035.9	49.3	42.3	91.6
1983-84e	758.6	648.6	1,407.2	548.5	468.9	1,113.5	49.3	42.1	91.4

* Universities' share equals 72.3% of total post-secondary in Ontario.

e = estimated data.

Source: Canada, Department of Finance, Federal-Provincial Relations Division,
 Ontario, Public Accounts, various years.

Table 15
Canadian Unemployment and Participation Rates
by Educational Attainment
(Seasonally Unadjusted)

	<u>Unemployment Rates</u>								<u>Participation*</u>
	<u>December</u>	<u>December</u>	<u>December</u>	<u>December</u>	<u>December</u>	<u>December</u>	<u>December</u>	<u>December</u>	<u>Rates</u>
	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>December 1983</u>
Total Canadian Labour Force	7.4%	8.3%	7.9%	7.0%	7.1%	8.5%	12.7%	11.1%	63.2%
0-8 Years	8.8	10.5	9.4	9.0	9.0	11.3	15.6	12.6	40.6
High School	8.4	9.5	9.0	7.8	8.3	10.0	14.8	13.2	64.6
Some Post-Secondary	6.4	6.9	7.0	4.8	6.7	6.6	11.1	11.0	68.1
Post-Secondary Certificate or Diploma	4.9	6.0	5.2	5.3	4.0	5.0	8.9	8.3	76.3
University Degree	2.9	3.0	3.4	2.8	2.5	3.2	5.9	3.8	84.5

Source: Estimates by Educational Attainment. The Labour Force Monthly Report. Statistics Canada.

* Labour Force percentage of population 15 years and over.

Figure 4
CANADIAN UNEMPLOYMENT RATES
ESTIMATES BY EDUCATIONAL ATTAINMENT
1976 to 1983

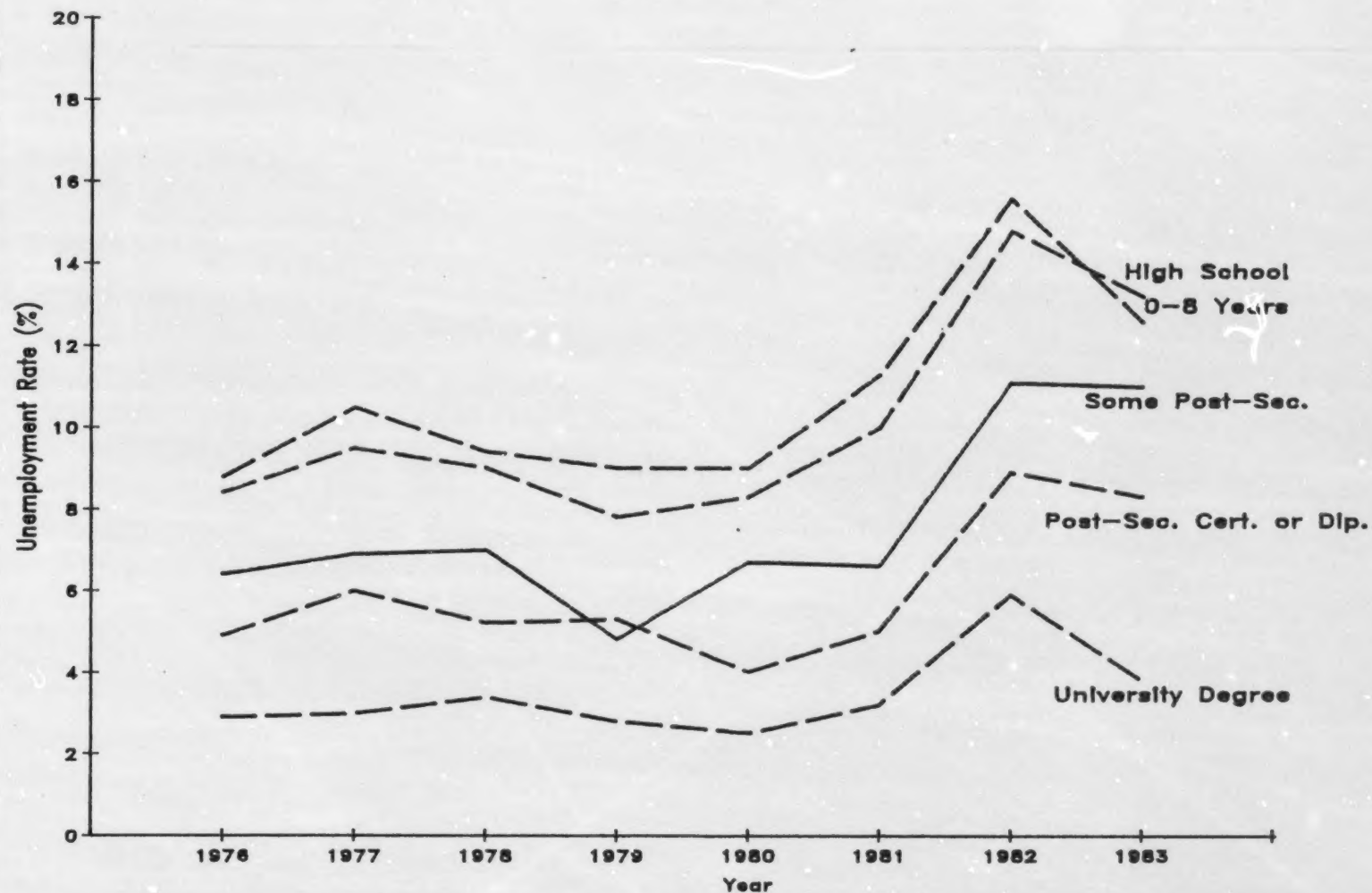


Table 16

Projected Annual Percentage Increases in the Consumer Price Index

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
<u>Economic Council of Canada</u> ¹	5.7	4.8	5.1	5.9	6.7	-
<u>Department of Finance</u> ²	5.8	5.2	5.3	4.8	4.5	4.6
<u>Conference Board of Canada</u> ³	5.8	4.8	5.6	5.7	4.6	4.2
	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>	<u>1986-87</u>	<u>1987-88</u>	
<u>Average of Projections</u> <u>Adjusted to University</u> <u>Fiscal Year</u> <u>(May 1 - April 30)</u>	5.5	5.1	5.4	5.4	5.0	

1. Economic Council of Canada, On the Mend, (Base Case Projection), October 1983.

2. Canada Department of Finance, The Fiscal Plan, 1984 Budget, 15 February 1984.

3. Conference Board of Canada, Medium-Term Forecast, 28 September 1983, and Quarterly Canadian Forecast, January 1984.

Table 17
Comparison of Benefit Costs
1981-82, 1982-83, and 1983-84

	1981-82 (\$000's)	1982-83 (\$000's)	Increase 1981-82 to 1982-83 (\$000's) %		1983-84 (\$000's)	Projected Increase 1982-83 to 1983-84 (\$000's) %	
<u>Statutory Benefits</u>							
O.H.I.P.	7,149	8,811	1,662	23.2	9,345	534	6.1
Canada Pension	8,430	9,652	1,222	14.5	10,064	412	4.3
Worker's Compensation	1,394	1,729	335	24.0	1,788	59	3.4
Unemployment Insurance	11,598	14,542	2,944	25.4	18,843	4,301	29.6
Total Statutory Benefits	28,571	34,734	6,163	21.6	40,040	5,306	15.3
<u>Non-Statutory Benefits</u>							
Pension							
- Current Service	51,251	58,944	7,693	15.0	63,715	4,771	8.1
- Experience Deficiency	389	422	33	8.5	352	-70	-16.6
- Past Service Liability	151	531	380	251.7	614	83	15.6
Group Life Insurance	4,002	4,669	667	16.7	5,284	615	13.2
Long Term Disability	3,307	4,011	704	21.3	4,587	576	14.4
Dental Insurance	4,401	5,409	1,008	22.9	5,962	553	10.2
Extended Health Care	2,091	2,860	769	36.8	3,374	514	18.0
Tuition Remission	2,665	2,931	266	10.0	3,585	654	22.3
Other	1,016	1,016	-	-	1,316	300	29.5
Total Non-Statutory Benefits	69,273	80,793	11,520	16.6	88,789	7,996	9.9
<u>Total Benefits</u>	97,844	115,527	17,683	18.1	128,829	13,302	11.5

Table 18

Benefit Costs and Increases Relative to
Salary Expenditure in Universities & Government
(excluding Algoma, OCA, OISE, Ryerson)

<u>Year</u>	<u>% Increase</u> <u>in Total</u> <u>Expenditures</u> <u>for Salaries</u>	<u>% Increase</u> <u>in Total</u> <u>Benefit</u> <u>Expenditures</u>	<u>Benefits as</u> <u>a % of</u> <u>Salaries</u>	<u>Ontario Public</u> <u>Service Benefits</u> <u>as a % of Salaries</u>
1973-74			9.5	11.3
1974-75	13.0	17.2	9.8	11.8
1975-76	14.8	25.3	10.7	13.6
1976-77	11.2	17.0	11.3	15.1
1977-78	7.5	7.8	11.3	14.8
1978-79	4.8	8.4	11.7	16.8
1979-80	4.5	1.0	11.3	16.4
1980-81	8.3	7.0	11.2	14.9
1981-82	12.2	16.6	11.6	15.3
1982-83	12.9	19.3	12.3	15.2

Source: Public Accounts of Ontario, various years.
Financial Report of Ontario Universities, various years.

Figure 5
ONTARIO GOVERNMENT AND UNIVERSITIES'
CONTRIBUTORY BENEFITS AS A PERCENTAGE OF SALARIES
1973-74 to 1982-83

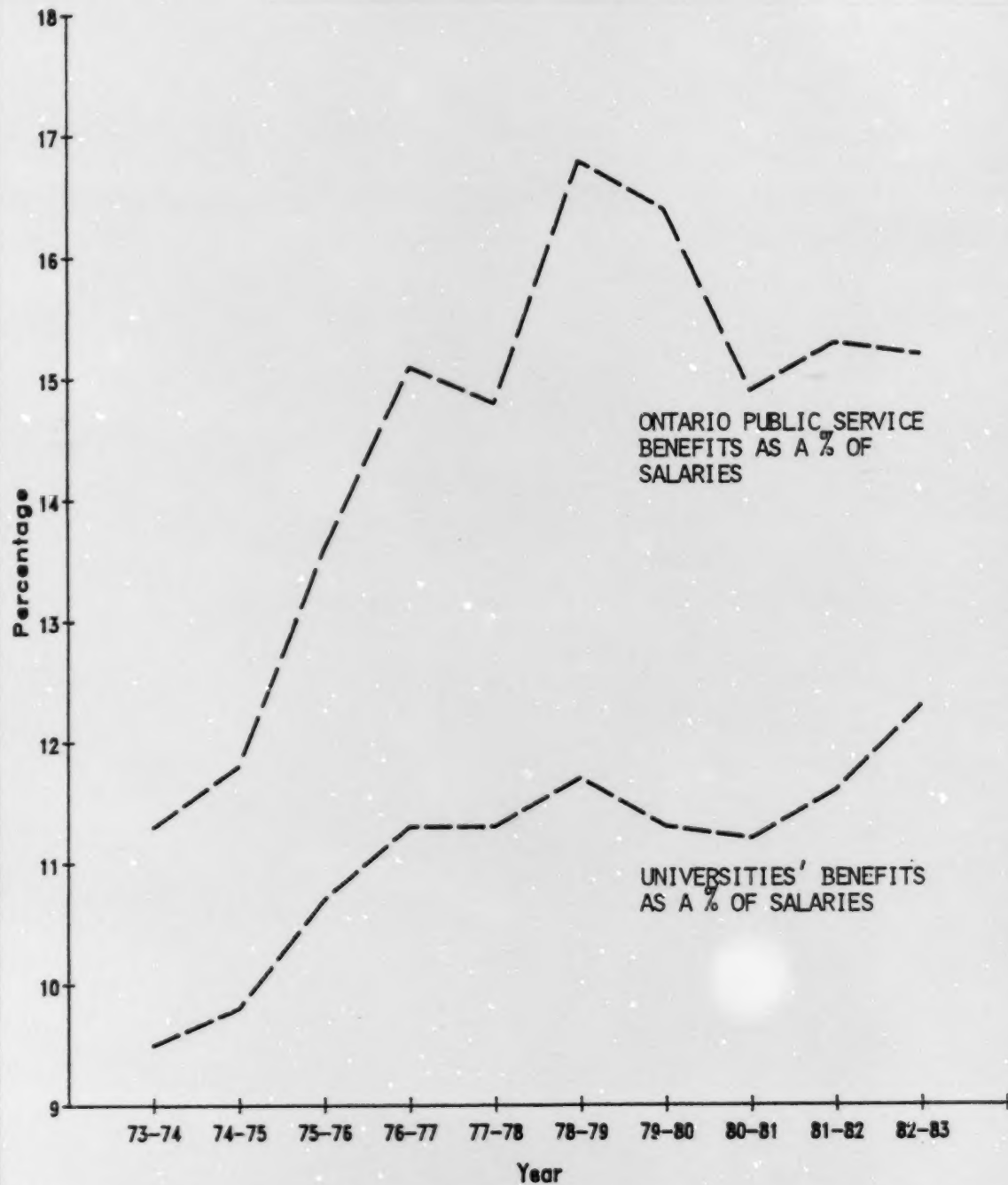


Table 19
Ontario University Non Salary Price Index
(1984 revision: 1980-81 = 100)

<u>Year</u>	<u>OUNSPI</u>	<u>CPI</u>	<u>OUNSPI</u> <u>Annual %</u> <u>Increase</u>	<u>CPI</u> <u>Annual %</u> <u>Increase</u>
<u>Actual</u>				
1970-71	37.3	44.7	-	-
1971-72	39.5	46.4	4.4	3.9
1972-73	40.8	48.8	3.4	5.1
1973-74	45.4	53.1	11.1	8.9
1974-75	52.9	59.2	16.6	11.4
1975-76	58.6	65.1	10.9	10.0
1976-77	63.9	69.5	8.9	6.8
1977-78	71.8	75.5	12.3	8.6
1978-79	78.8	82.4	9.9	9.1
1979-80	89.1	90.0	13.1	9.2
1980-81	100.0	100.0	12.2	11.2
1981-82	113.5	112.1	13.5	12.1
1982-83	125.0	122.6	10.1	9.4
<u>Estimated</u>				
1983-84	133.0	129.4	6.4	3.5
1984-85	140.8	136.0	5.9	5.1
1985-86	149.7	143.3	6.3	5.4
1986-87	159.1	151.1	6.3	5.4
1987-88	168.3	158.6	5.8	5.0

Figure 6
ANNUAL PERCENTAGE CHANGES IN THE
OUNSPI AND CPI
1971-72 to 1982-83

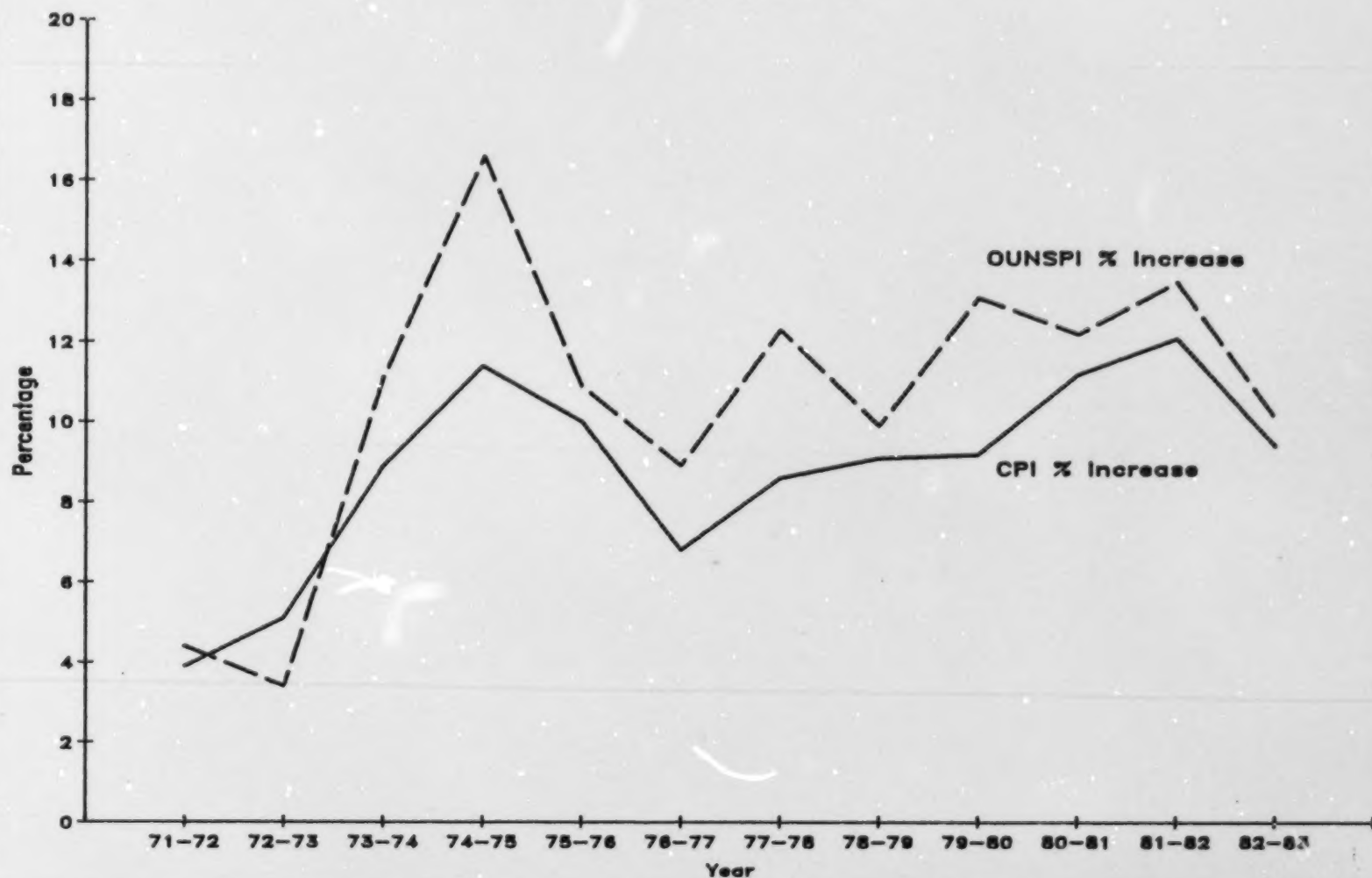


Table 20

Index of Expenditure on Library Acquisitions

	<u>Acquisitions as % of Total Operating Expenses</u>	<u>Constant Dollars</u>	<u>Constant Dollars per FTE</u>	<u>Cost Index</u>
1970-71	2.9	100.0	100.0	100.0
1972-73	2.5	93.8	82.8	112.5
1974-75	2.3	85.3	67.2	134.2
1976-77	2.0	75.9	53.9	169.7
1978-79	2.1	64.6	48.4	234.0
1980-81	2.3	64.9	46.4	300.0
1981-82	2.2	59.2	40.4	348.6
1982-83	2.1	55.9	35.9	410.0

Source: COFO-UO Financial Report of Ontario Universities,
various years.
Bowker (U.S.) Hardcover Book and Periodical.
Price Indices converted for Canadian dollar
fluctuations.

Figure 7
INDEX OF UNIVERSITY EXPENDITURES
ON LIBRARY ACQUISITIONS
1970-71 to 1982-83

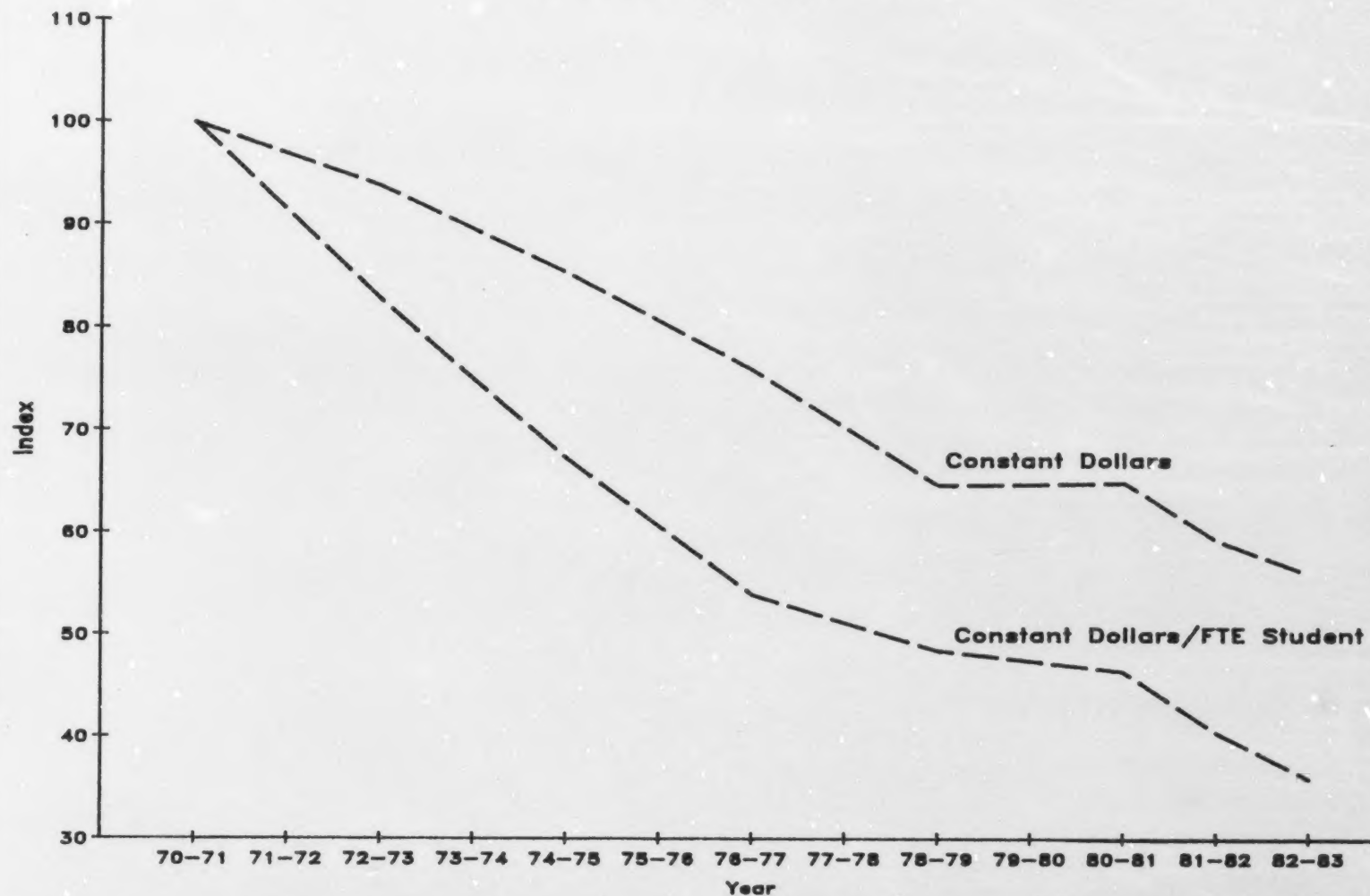


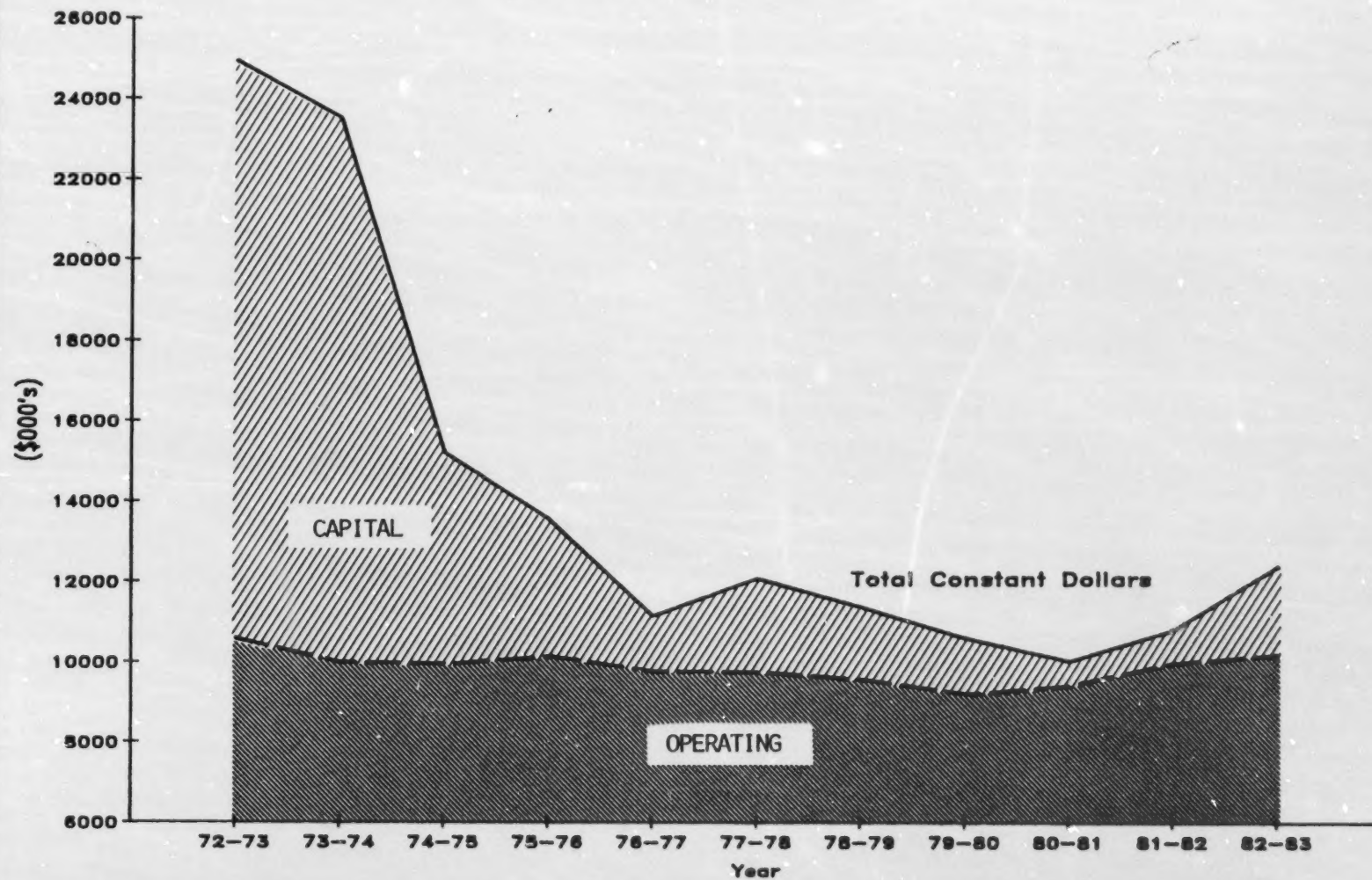
Table 21
Total Equipment Purchases by Fund
(\$000's)

<u>Year</u>	<u>Operating</u>	<u>Capital</u>	<u>Total Purchases*</u>	<u>Total Constant Dollars*</u>
1972-73	42.4%	57.8%	\$ 24,959	\$ 24,959
1973-74	42.5%	57.5%	24,846	23,528
1974-75	65.4%	34.6%	18,468	15,213
1975-76	74.8%	25.2%	18,287	13,566
1976-77	87.6%	12.4%	15,644	11,142
1977-78	80.6%	19.4%	19,088	12,089
1978-79	84.1%	15.9%	20,085	11,373
1979-80	86.9%	13.1%	20,689	10,593
1980-81	94.0%	6.0%	22,163	10,024
1981-82	92.4%	7.6%	26,349	10,794
1982-83	82.2%	17.8%	32,045	12,392

Source: COFO-UO, Financial Report of Ontario Universities, various years. A relatively small share of these purchases were for furniture and furnishings.

*Excludes Ryerson, OISE, OCA, Algoma, and Wilfrid Laurier.

Figure 8
TOTAL EQUIPMENT PURCHASES
BY FUND
1972-73 to 1982-83



ADDITIONAL FIGURES
AND TABLES

Appendix 1

Report of the Committee on Enrolment Statistics and Projections

Summary of Situation in 1983-84

The Committee on Enrolment Statistics and Projections considered a number of factors in preparing its 1983-84 enrolment projections for last year's operating grants brief to OCUA. Based on the indicated intentions of Ontario grade 13 students, the decline in the numbers of visa student applicants and the desire of some universities to attempt to maintain existing enrolment levels, CESP expected that first year full-time undergraduate enrolment in 1983-84 would remain constant. The imposition of higher visa student fees in 1982-83 (the full impact of which would be felt in 1983-84) was expected to dampen visa student intake at the graduate level. However, the pipeline effect of increases in recent years would result in enrolment increases in upper years in both undergraduate and graduate programmes. Based on all of these considerations, CESP projected increases of 3-4% in undergraduate enrolment and 0-2% in graduate enrolment for 1983-84.

Detailed 1983-84 data on full-time enrolment provided to CESP by the universities and summary data on part-time enrolment obtained from MCU show that full-time undergraduate enrolment increased by 4.7% and full-time graduate enrolment increased by 5.2%. Part-time undergraduate enrolment registered an increase of 2.3% while part-time graduate enrolment showed almost no change.

Closer examination of the detailed full-time data shows that first year undergraduate enrolment (excluding education and professional programmes such as law and medicine) increased by 3.2% in 1983-84, an increase of over 1,400 students. This increase was the result of a 6.3% increase in

first year Canadian and landed immigrant students (about 2,600 students), which more than offset a 27.5% decline in first year visa students. (The 6.3% increase in first year non-visa students is not surprising in view of the fact that Ontario grade 13 enrolment had increased by over 7% in 1982-83. However, information about this increase in grade 13 enrolment had not been available to nor anticipated by CESP; preliminary Ministry of Education figures had given no indication that grade 13 enrolment would rise in 1982-83.) Total first year enrolment in arts and science programmes increased by over 6% in 1983-84. In commerce and business programmes, which had recorded increases in recent years, first year enrolment declined by almost 4%. Engineering registered a decline of over 5%. (The decline in engineering programmes, however, resulted from decisions by some universities to reduce the number of first year places available.)

Undergraduate enrolment in upper years (again excluding education and professional programmes) increased 5.8% in 1983-84, a gain of over 5,000 students. Visa students accounted for only 10% of this enrolment increase, compared to 30% of the upper years enrolment increase in 1982-83. Enrolment in arts and science programmes increased by 9.8% and enrolment in commerce and business programmes declined by 3.6%. Other programmes, when added together, showed a net increase of less than 1%.

Following two years of relatively stable enrolment, education programmes showed an enrolment increase of 8% in 1983-84. Enrolment in professional programmes showed a marginal decline of 1%; this followed a marginal increase in 1982-83.

At the graduate level, full-time enrolment in master's and first stage doctoral programmes increased 5.8% in 1983-84 while second stage doctoral enrolment rose by 4.8%. New entrants at the master's and first stage doctoral level increased by 5.1% following a 3% decline in 1982-83. The situation was reversed at the second stage doctoral level; new entrants declined by 4.6% compared to a 9.4% increase in the previous year. (This may be accounted for by the fact that visa students entering at the second stage doctoral level showed a decline of over 41% in 1983-84.) Canadian and landed immigrant new entrants increased by 8.5% at the master's level and by 6.3% at the second stage doctoral level. Upper years master's enrolment was up 5.7% and upper years doctoral enrolment increased by 7.5%.

Projections for 1984-85

Following significant enrolment increases in each of the past four years, enrolment in Ontario universities is at an all time high. While significant portions of the increases in recent years could be attributed to visa students, it has already been noted that visa student enrolment at the first year undergraduate level has declined in the two previous years. On the other hand, there have been higher increases of Canadian and landed immigrant entrants than might have been predicted. A portion of these increases might be attributed to continuing high levels of unemployment, particularly among youth. High unemployment levels have likely led to an increase in the demand for admission to first year university, to higher retention among in-course undergraduate students and to increased intake at the graduate level. While the economy is showing some signs of improvement, most economists predict that high levels of unemployment will continue.

(a) Full-time Undergraduate Enrolment

While demographic data might suggest that applications from Ontario grade 13 students could be expected to decline, it would appear that an increase in the numbers of grade 13 students repeating the year in an effort to earn better grades, coupled with the continuing youth unemployment picture, will continue the high demand for admission into university. Also, it does not seem likely that there will be a further significant decline this year in visa student applications. CESP expects, however, that system capacity will be the determining factor as more universities attempt to maintain existing enrolment levels. (This view is given added emphasis by the announcement in late December of 1983 of the funding formula to be used in 1984-85. This new formula provides even greater disincentives to universities contemplating increasing their enrolment intake than does the present formula.) CESP therefore projects only a modest increase in first year undergraduate enrolment (excluding education and professional programmes) in 1984-85, in the order of 1-2%, an increase of 500-1,000 students.

In considering undergraduate enrolment in upper years (again excluding education and professional programmes), the pipeline effect of the increased admissions in recent years will continue to be the determining factor. As a result, CESP projects an increase

of around 4,000 - 5,000 upper year students. Enrolment in education and professional programmes is expected to remain stable.

In summary, CESP projects an increase in full-time undergraduate enrolment of 2.9-3.9% in 1984-85. This represents an increase of from 4,500 to 6,000 students.

(b) Full-time Graduate Enrolment

A number of factors influenced CESP's projection of full-time graduate enrolment for 1984-85. As a result of the declines in visa student new entrants at both the master's and doctoral levels in 1983-84, CESP anticipates that the pipeline effect will result in a decline of some 400-600 visa students in 1984-85. On the other hand, the increased intake of Canadian masters and doctoral level students in 1983-84 is likely to result in an increase of similar magnitude in the coming year. In consideration of these offsetting effects, CESP projects that full-time graduate enrolment in 1984-85 will remain stable.

(c) Part-time

CESP again notes that part-time enrolment, at both the undergraduate and graduate levels, continues to exhibit a greater degree of fluctuation from year to year than does full-time enrolment. Continuing the practice of recent years, CESP predicts that part-time enrolment will follow the patterns of full-time enrolment. Accordingly, CESP projects that in 1984-85 part-time undergraduate enrolment will increase by 2.9-3.9% and part-time graduate enrolment will remain stable.

In summary, overall full-time equivalent enrolment (all levels both full-time and part-time) in the Ontario universities is projected to increase by 2.7-3.5% in 1984-85. CESP must again remind the Operating Grants Committee that this increase may not be experienced uniformly among institutions.

Appendix 2

Update and Revisions to the Ontario University Non-Salary

Price Index

In 1978, the Non-Salary Price Index Task Force of the Committee of Finance Officers - Universities of Ontario, reported that it had developed a non-salary price index which was to provide "a more sensitive tool to assist in measuring the likely impact of inflation on non-salary expenditure, and a more accurate measure of the extent of inflationary erosion between any two years."* That index, the Ontario University Non-Salary Price Index (OUNSPI), was based on the non-salary expenditure patterns of Ontario Universities as reported to COFO-UO in the 1976-77 university fiscal year.

The index, which used 1970-71 as the base period, measured both price changes between any two years and the overall change since the base period of 21 non-salary components, as well as the total non-salary portion of university budgets. The OUNSPI measured non-salary price changes for library acquisitions, equipment and furniture, operational supplies and expenses, utilities, renovations, alterations and major repairs, externally contracted services, travel, insurance and space rental. Since its initial publication six years ago, the OUNSPI has been widely used and the methodology employed in its construction has been replicated elsewhere.

*Council of Ontario Universities, Ontario University Non-Salary Price Index, February 1978.

In order to remain useful, however, a price index like the OUNSPI must not only be updated on a regular basis by the addition of more current price information, but should also be revised from time to time to take account of altered patterns of expenditure. To this end, the Financial Report of Ontario Universities 1982-83 was employed to indicate the relative proportions of non-salary expenditures made during the most recent year for which information is available. This included detailed information on utility costs reported to COFO-UO and the Ontario Association of Physical Plant and Planning Administrators. A survey of finance officers was also conducted which provided further detailed information on some of the data reported to COFO-UO.

The result of this review of university non-salary spending patterns is shown in Figure A-1. The Old Index Weight values are those established in 1978 and published previously. The New Index Weight values are those which result from a detailed analysis of 1982-83 spending patterns. Note that increased weights have been assigned to books, periodicals, equipment, computing, postage, natural gas, telephones and renovations. A new component, costs of water, has also been added.

To keep the OUNSPI relevant and the information published meaningful, it was also decided to rebase the data. That is, instead of continuing to publish the index with a base of 1970-71 equal to 100.0 as has been done until now, the base for the index has been revised such that 1980-81 is now equal to 100.0. This more current base will mean that index values published for years other than 1980-81 will represent a specified

percentage of the 1980-81 value. That is, an overall OUNSPI of 37.8 for 1970-71 should mean that prices of non-salary items purchased by universities in 1970-71 should equal 37.8% of prices of those same items in 1980-81.

Finally, the two sets of index weights need to be linked in such a fashion that the old weights, published in 1978, can still apply to the early years of the OUNSPI and the new weights, published in 1984 can apply to the more recent years. The new base, 1980-81, will also serve as the connecting point between the two patterns of expenditure. The OUNSPI percentage change and index values for the years up to and including 1980-81 will continue to be based upon the old index weights. The OUNSPI percentage change and index values for the years since 1980-81, including the estimates for future years published in Table 20 of this Brief, will be based on the new index weights.

To enable readers of this and previous Briefs to OCUA to utilize both the total OUNSPI and the various components, a series of tables are provided.

- Table A-1 provides an update to 1982-83 of index values published previously. The indices are published for each component based on 1970-71 being equal to 100.0.
- Table A-2 provides the same information but with the base for each component revised such that 1980-81 equals 100.0. Note that index values for water are now published because this component is included in the revised weighting pattern.

- Table A-3 provides information on the annual percentage variation in the various components including water.

Figure A-1

Source and Weighting Pattern of Component Indices

<u>Component</u>	<u>Old Index Weight</u>	<u>New Index Weight</u>	<u>Source</u>
Books	6	7	Bowker (U.S.) Hardcover Book Price Index converted for Canadian dollar fluctuations
Periodicals	3	7	Bowker (U.S.) Periodical Price Index, converted for Canadian dollar fluctuations
Equipment	8	10	U.S. Department of Labor. Monthly Labor Review. Price index for machinery and equipment, converted for Canadian dollar fluctuations
Computing	6	10	Research Associates of Washington. Higher Education Prices and Price Indexes: 1983 Update. Data processing hardware. Converted for Canadian dollar fluctuations
Furniture	3	2	Statistics Canada Industry Selling Price Index - Office Furniture Manufacturers
Stationery and Paper	10	8	Statistics Canada Industry Selling Price Index - Paper and Allied Industries
Printing Materials	9	7	Statistics Canada Industry Selling Price Index - Fine Papers
Tools and Apparatus	9	8	Statistics Canada Industry Selling Price Index - Hardware, Tool and Cutlery Manufacturers
Chemicals	5	4	Statistics Canada Industry Selling Price Index - Chemical & Chemical Products Industries
Postage	2	3	Statistics Canada Consumer Price Index - Postage
Long Distance	2	2	Statistics Canada Consumer Price Index - Communications
Electricity	9	9	Statistics Canada Industry Selling Price Index - Electric Power Selling Price Index (Non-Residential) over 3,000 KW - Ontario
Gas	5	7	Statistics Canada Consumer Price Index - Piped and Bottled Gas
Oil	3	1	Statistics Canada Industry Selling Price Index - Heavy Fuel Oil, #6
Telephone	3	4	Statistics Canada Consumer Price Index - Communications
Water	-	1	Statistics Canada Consumer Price Index - Water
Renovations	2	3	Statistics Canada Non-Residential Construction Price Index - Materials
Transportation	5	3	Statistics Canada Consumer Price Index - Transportation
Shelter	2	1	Statistics Canada Consumer Price Index - Shelter
Food Away From Home	2	1	Statistics Canada Consumer Price Index - Food Purchased From Restaurants
Insurance	2	1	Statistics Canada Consumer Price Index - Homeowner's Insurance Premiums
Space Rental	2	1	Statistics Canada Consumer Price Index - Shelter

Table A-1

Component Price Indices in the Ontario University Non-Salary Price Index

(Based on Fiscal Year 1970-71 = 100)

Component	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Books	109.9	105.8	100.2	113.2	135.3	140.9	168.0	183.9	230.2	238.3	263.2	310.7 ^e
Periodicals	108.3	120.5	149.0	159.3	186.6	204.3	240.6	294.2	326.7	374.0	434.0	509.2
Equipment	101.4	101.8	107.1	127.7	144.4	151.0	175.9	202.3	224.7	252.8	281.6	302.1
Computing	101.9	103.3	104.5	108.1	116.6	117.2	127.9	135.8	143.8	172.3	198.0	200.9
Furniture	105.0	109.9	122.0	140.0	151.9	161.1	169.0	180.9	204.0	225.3	253.0	271.0
Stationery and Paper	101.1	103.1	124.0	165.9	180.9	187.5	196.9	216.4	253.9	289.7	315.7	313.9
Printing Materials	101.7	106.3	130.4	161.0	164.5	163.3	170.1	182.4	208.3	229.1	252.7	259.3
Tools and Apparatus	103.2	105.6	112.8	130.9	145.2	154.6	172.5	190.7	222.6	254.5	284.0	307.6
Chemicals	101.1	102.9	114.2	149.0	163.9	170.8	181.0	196.7	229.5	264.0	297.4	312.2
Postage	112.3	120.8	120.8	120.8	121.3	144.7	181.3	212.1	253.7	254.2	315.6	444.8
Long Distance	102.6	107.2	109.2	110.3	114.4	122.9	134.3	141.8	145.7	153.3	171.0	196.9
Electricity	104.9	112.1	121.1	131.0	143.3	183.8	235.8	248.3	274.1	306.2	336.3	369.0
Gas	101.5	101.9	106.9	120.2	151.2	184.6	213.4	244.6	258.1	304.2	384.9	469.4
Oil	111.7	108.0	166.7	253.6	279.2	330.9	399.8	459.0	581.9	712.0	887.4	952.9
Telephone	102.6	107.2	109.2	110.3	114.4	122.9	134.3	141.8	146.7	153.3	171.0	196.9
Renovations	104.4	109.8	122.9	146.2	154.3	162.9	174.0	193.3	222.5	243.5	269.2	285.6
Transportation	103.9	105.8	111.1	123.3	138.4	151.2	160.3	170.8	190.2	217.6	257.0	284.3
Shelter	105.3	111.6	118.9	128.1	140.5	155.8	169.0	180.4	190.3	204.7	230.4	254.5
Food Away From Home	104.5	112.4	130.1	154.1	172.4	185.2	195.1	212.1	237.7	258.0	283.6	310.8
Insurance	128.5	155.4	190.2	215.3	271.2	328.7	368.9	390.6	413.4	450.0	540.1	585.6
Space Rental	105.3	111.6	118.9	128.1	140.5	155.8	169.0	180.4	190.3	204.7	230.4	254.5

e = estimated figure

Table A-2

Component Price Indices in the Ontario University Non-Salary Price Index

(Based on the Fiscal Year 1980-81 = 100)

Components	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Books	42.0	46.1	44.4	42.0	47.5	56.8	59.1	70.5	77.2	96.6	100.0	110.4	130.4e
Periodicals	26.7	29.0	32.2	39.8	42.6	49.9	54.6	64.3	78.7	87.4	100.0	116.0	136.2
Equipment	39.6	40.1	40.3	42.4	50.5	57.1	59.7	69.6	80.0	88.9	100.0	111.4	119.5
Computing	58.0	59.1	60.0	60.7	62.7	67.7	68.0	74.2	78.8	83.5	100.0	114.9	116.6
Furniture	44.4	46.6	48.8	54.1	62.1	67.4	71.5	75.0	80.3	90.5	100.0	112.3	120.3
Stationery and Paper	34.5	34.9	35.6	42.8	57.3	62.4	64.7	68.0	74.7	87.6	100.0	109.0	108.4
Printing Materials	43.6	44.4	46.4	56.9	70.3	71.8	71.3	74.2	79.6	90.9	100.0	110.3	113.2
Tools and Apparatus	39.3	40.6	41.5	44.3	51.4	57.1	60.7	67.8	74.9	87.5	100.0	111.6	120.9
Chemicals	37.9	38.3	39.0	43.3	56.4	62.1	64.7	68.6	74.5	86.9	100.0	112.6	118.3
Postage	39.3	44.2	47.5	47.5	47.5	47.7	56.9	71.3	83.4	99.8	100.0	124.2	175.0
Long Distance	65.2	66.9	69.9	71.2	72.0	74.6	80.2	87.6	92.5	95.7	100.0	111.6	128.4
Electricity	32.7	34.3	36.6	39.6	42.8	46.8	60.0	77.0	81.1	89.5	100.0	109.8	120.5
Gas	32.9	33.4	33.5	35.1	39.5	49.7	60.7	70.2	80.4	84.8	100.0	126.5	154.3
Oil	14.0	15.7	15.2	23.4	35.6	39.2	46.5	56.2	64.5	81.7	100.0	124.6	133.8
Telephone	65.2	66.9	69.9	71.2	72.0	74.6	80.2	87.6	92.5	95.7	100.0	111.6	128.4
Water	54.3	54.5	54.5	54.5	58.7	63.7	71.6	80.0	86.0	92.3	100.0	112.3	118.1
Renovations	41.1	42.9	45.1	50.5	60.0	63.4	66.9	71.5	79.4	91.4	100.0	110.6	117.3
Transportation	46.0	47.7	48.6	51.1	56.7	63.6	69.5	73.7	78.5	87.4	100.0	118.1	130.6
Shelter	48.9	51.4	54.5	58.1	62.6	68.6	76.1	82.6	88.1	93.0	100.0	112.5	124.3
Food Away From Home	38.8	40.5	43.6	50.4	59.7	66.8	71.8	75.6	82.2	92.1	100.0	109.9	120.5
Insurance	22.2	28.6	34.5	42.3	47.8	60.3	73.0	82.0	86.8	91.9	100.0	120.0	130.1
Space Rental	48.9	51.4	54.5	58.1	62.6	68.6	76.1	82.6	88.1	93.0	100.0	112.5	124.3

e = estimated figure.

Table A-3

Annual Percentage Variation in the Ontario University Non-Salary Price Index Components

Component	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Books	9.9	-3.7	-5.3	13.0	19.5	4.1	19.2	9.5	25.2	3.5	10.4	18.1e
Periodicals	8.3	11.3	23.7	6.9	17.1	9.5	17.8	22.3	11.0	14.5	16.0	17.3
Equipment	1.4	0.4	5.2	19.2	13.1	4.6	16.5	15.0	11.1	12.5	11.4	7.3
Computing	1.9	1.4	1.2	3.4	7.9	0.5	9.1	6.2	5.9	19.8	14.9	1.5
Furniture	5.0	4.7	11.0	14.8	8.5	6.1	4.9	7.0	12.8	10.4	12.3	7.1
Stationery and Paper	1.1	2.0	20.3	33.8	9.0	3.6	5.0	9.9	17.3	14.1	9.0	-0.6
Printing Materials	1.7	4.5	22.7	23.5	2.2	-0.7	4.2	7.2	14.2	10.0	10.3	2.6
Tools and Apparatus	3.2	2.3	6.8	16.0	10.9	6.5	11.6	10.6	16.7	14.3	11.6	8.3
Chemicals	1.1	1.8	11.0	30.5	10.0	4.2	6.0	8.7	16.7	15.0	12.6	5.0
Postage	12.3	7.6	-	-	0.4	19.3	25.3	17.0	19.6	0.2	24.2	40.9
Long Distance	2.6	4.5	1.9	1.0	3.7	7.4	9.3	5.6	3.5	4.5	11.6	15.1
Electricity	4.9	6.9	8.0	8.2	9.4	28.3	28.3	5.3	10.4	11.7	9.8	9.7
Gas	1.5	0.4	4.9	12.4	25.8	22.1	15.6	14.6	5.5	17.9	26.5	22.0
Oil	11.7	-3.3	54.4	52.1	10.1	18.5	20.8	14.8	26.8	22.4	24.6	7.4
Telephone	2.6	4.5	1.9	1.0	3.7	7.4	9.3	5.6	3.5	4.5	11.6	15.1
Water	-	-	-	7.7	8.5	12.3	11.7	7.6	7.3	8.3	12.3	5.1
Renovations	4.4	5.2	11.9	19.0	5.5	5.6	6.8	11.1	15.1	9.4	10.6	6.1
Transportation	3.9	1.8	5.0	11.0	12.2	9.2	6.0	6.6	11.4	14.4	18.1	10.6
Shelter	5.3	6.0	6.5	7.7	9.7	10.9	8.5	6.7	5.5	7.6	12.5	10.5
Food Away From Home	4.5	7.6	15.7	18.4	11.9	7.4	5.3	8.7	12.1	8.5	9.9	9.6
Insurance	28.5	20.9	22.4	13.2	26.0	21.2	12.2	5.9	5.8	8.9	20.0	8.4
Space Rental	5.3	6.0	6.5	7.7	9.7	10.9	8.5	6.7	5.5	7.6	12.5	10.5

e = estimated figure